PTO/SB/21 (09-04) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE TRADEM perwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/815,453 Filing Date TRANSMITTAL March 31, 2004 First Named Inventor **FORM** Ricardo E. Gonzalez Art Unit 2142 **Examiner Name** Andrew T. Caldwell (to be used for all correspondence after initial filing) Attorney Docket Number PA2718US

|  | ar (tamber o                  | r Pages In This Submission   | EN       | CLOSUPES (S)   |           |  |
|--|-------------------------------|--|----------|--|-----------|--|
|  | Amendm A A Extension Express  | ee Attached ent/Reply fiter Final ffidavits/declaration(s) n of Time Request Abandonment Request on Disclosure Statement |          | Drawing(s)  Licensing-related Papers  Petition  Petition to Convert to a Provisional Application Power of Attorney, Revoca Change of Correspondence Terminal Disclaimer  Request for Refund  CD, Number of CD(s)  Landscape Table on | e Address | After Allowance Communication to TC  Appeal Communication to Board of Appeals and Interferences  Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Proprietary Information  Status Letter  Other Enclosure(s) (please Identify below):  1) Confirmation postcard; 2) Duplicate of IDS; 3) PTO/SB/08 (6 pp., x2); 4) Copies of 22 cited nonpatent references; 5) List of co-pending applications. |
| Certified Copy of Priority Document(s)  Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53  |                               |  | Total    | narks page number does not includ  |           |  |
| Firm N   | lame                          | T  |          | OF APPLICANT, ATT  |           |  |
|  | iaine                         | Carr & Ferrell I   | _LP      | Cust. No.  | 22830/    |  |
|  | Printed name Peter L. Holland |  |          | olland   |           | · · · · · · · · · · · · · · · · · · ·  |
| Date   | Date June 6, 2007             |  | Reg. No. |  | Reg. No.  | 57,113   |
| CERTIFICATE OF TRANSMISSION/MAILING  I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on |                               |  |          |  |           |  |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Peter L. Holland, Reg. No. 57,113

Date

June 6, 2007

Signature

Typed or printed name



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS:

Ricardo E. Gonzalez et al.

**APPLICATION NO.:** 

10/815,453

FILED:

March 31, 2004

TITLE:

Configuring a Multi-Processor System

**EXAMINER:** 

Andrew T. Caldwell

**GROUP ART UNIT:** 

2142

ATTY.DKT.NO.:

**PA2718US** 

#### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 6, 2007.

Peter L. Holland, Reg. No. 57,113

MAIL STOP AMENDMENT COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT Under 37 C.F.R. §§ 1.56, and 1.97-1.98

SIR:

Pursuant to the provisions of 37 C.F.R. §§ 1.56 and 1.97-98 of the Rules of Practice in Patent Cases, enclosed herewith is form PTO-SB-08, listing several references, and a list of Co-Pending Applications.

The Examiner is requested to make these references of official record in the application. The references cited may be material to examination of the application and are submitted in compliance with Applicant's duty of disclosure as defined by 37 C.F.R. § 1.56. No representation is made or intended as to the completeness of this list, nor is the inclusion of any reference on this list an admission that it is prior art or pertinent to this application.

Applicant believes no fee is due with this submission. If a fee is due, however, the Commissioner is hereby authorized to charge any necessary fee to Account Number 06-0600. A copy of this statement is submitted in duplicate for this purpose.

Respectfully submitted, Ricardo E. Gonzalez et al.

June 6, 2007

By:

Peter L. Holland, Reg. No. 57,113

Carr & Ferrell *LLP* 2200 Geng Road Palo Alto, CA 94303

TEL: (650) 812-3400 FAX: (650) 812-3444

Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Inder the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Mute for form 1449/PTO

JUN 0 8 2007

PADEMA

Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

6

Complete if Known

Application Number 10/815,453

Filing Date March 31, 2004

First Named Inventor Ricardo E. Gonzalez

Art Unit 2142

Examiner Name Andrew T. Caldwell

Attorney Docket Number PA2718US

|                       |              |  | U. S. PATEN                    | T DOCUMENTS  |   |
|-----------------------|--------------|--|--------------------------------|--|---|
| Examiner<br>Initials* | Cite<br>No.1 | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |              | Number-Kind Code <sup>2 (if known)</sup> |                                |  | i igures Appear   |
|                       |              | <sup>US-</sup> 6,698,015 B1              | 02-24-2004                     | Moberg et al.                                      |   |
|                       |              | <sup>US-</sup> 6,799,236 B1              | 09-28-2004                     | Dice et al.  |   |
|                       |              | <sup>US-</sup> 5,822,588                 | 10-13-1998                     | Sterling et al.                                    |   |
|                       |              | <sup>US-</sup> 6,817,013 B2              | 11-09-2004                     | Tabata et al.                                      |   |
|                       |              | <sup>US-</sup> 6,968,544 B1              | 11-22-2005                     | Schneider  |   |
|                       |              | <sup>US-</sup> 7,178,062 B1              | 02-13-2007                     | Dice   |   |
|                       |              | <sup>US-</sup> 5,999,734                 | 12-07-1999                     | Willis et al.                                      |   |
|                       |              | <sup>US-</sup> 6,622,233 B1              | 09-16-2003                     | Gilson   |   |
|                       |              | <sup>US-</sup> 5,535,406                 | 07-09-1996                     | Kolchinsky   |   |
|                       |              | <sup>US-</sup> 6,092,174                 | 07-18-2000                     | Roussakov  |   |
| •                     |              | <sup>US-</sup> 5,956,518                 | 09-21-1999                     | DeHon et al.                                       |   |
|                       |              | <sup>US-</sup> 2004/0019765 A1           | 01-29-2004                     | Klein, Jr.   |   |
|                       |              | <sup>US-</sup> 5,361,373                 | 11-01-1994                     | Gilson   |   |
|                       |              | <sup>US-</sup> 2005/0166038 A1           | 07-28-2005                     | Wang et al.  |   |
|                       |              | <sup>US-</sup> 5,488,612                 | 01-30-1996                     | Heybruck   |   |
|                       |              | US- 5,258,668                            | 11-02-1993                     | Cliff et al.                                       |   |
|                       |              | <sup>US-</sup> 5,260,610                 | 11-09-1993                     | Pedersen et al.                                    |   |
|                       |              | <sup>US-</sup> 5,260,611                 | 11-09-1993                     | Cliff et al.                                       |   |
|                       |              | <sup>US-</sup> 5,274,581                 | 12-28-1993                     | Cliff et al.                                       |   |

| Examiner Initials* | Cite<br>No.1 | Foreign Patent Document   | Publication Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear |    |
|--------------------|--------------|---|------------------|--|---|----|
|                    |              | Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (if known) | MM-DD-YYYY       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,            |   | T° |
|                    |              | EP 0 668 659 A2   | 08-23-1995       | Pilkington Germany                                 |   |    |
|                    |              | EP 0 507 507 A2   | 10-07-1992       | American Telephone                                 |   |    |
|                    |              | TW 152,994  | 07-22-2002       | Adaptive Silicon, Inc.                             |   |    |
|                    |              | TW 168,210  | 04-15-2003       | Adaptive Silicon, Inc.                             |   |    |
| -                  |              | TW 152,355  | 07-10-2002       | Adaptive Silicon, Inc.                             |   |    |
|                    |              |   |                  | ·  |   |    |

| Examiner<br>Signature | Date<br>Consid | ered |  |
|-----------------------|----------------|------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| , , , , , , , , , , , , , , , , , , , |                     |  |  |  |
|---------------------------------------|---------------------|--|--|--|
| Application Number                    | 10/815,453          |  |  |  |
| Filing Date                           | March 31, 2004      |  |  |  |
| First Named Inventor                  | Ricardo E. Gonzalez |  |  |  |
| Art Unit                              | 2142                |  |  |  |
| Examiner Name                         | Andrew T. Caldwell  |  |  |  |
| Attorney Docket Number                | PA2718US            |  |  |  |

Complete if Known

| Examiner<br>Initials* | Cite<br>No.1 |                             |            | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|-----------------------|--------------|-----------------------------|------------|--|---|
|                       |              | <sup>US-</sup> 5,343,406    | 08-30-1994 | Freeman et al.                                     |   |
|                       |              | <sup>US-</sup> 5,414,377    | 05-09-1995 | Freidin  |   |
|                       |              | <sup>US-</sup> 5,726,584    | 03-10-1998 | Freidin  |   |
|                       |              | <sup>US-</sup> 5,426,378    | 06-20-1995 | Ong  |   |
|                       |              | <sup>US-</sup> 5,920,202    | 07-06-1999 | Young et al.                                       |   |
|                       |              | <sup>US-</sup> 5,926,036    | 07-20-1999 | Cliff et al.                                       |   |
|                       |              | <sup>US-</sup> 5,963,050    | 10-05-1999 | Young et al.                                       |   |
|                       |              | <sup>US-</sup> 5,977,793    | 11-02-1999 | Reddy et al.                                       |   |
|                       |              | <sup>US-</sup> 5,982,195    | 11-09-1999 | Cliff et al.                                       |   |
|                       |              | <sup>US-</sup> 5,986,465    | 11-16-1999 | Mendel   |   |
|                       |              | <sup>US-</sup> 2001/0049816 | 12-06-2001 | Rupp   |   |
|                       |              | <sup>US-</sup> 6,633,181 B1 | 10-14-2003 | Rupp   |   |
|                       |              | <sup>US-</sup> 5,357,152    | 10-18-1994 | Jennings, III et al.                               |   |
|                       |              | <sup>US-</sup> 5,742,180    | 04-21-1998 | DeHon et al.                                       |   |
|                       |              | <sup>US-</sup> 5,436,574    | 07-25-1995 | Veenstra   | ·   |
|                       |              | <sup>US-</sup> 4,635,261    | 01-06-1987 | Anderson et al.                                    |   |
|                       |              | <sup>US-</sup> 4,766,659    | 08-30-1988 | Cronenwett et al.                                  |   |
|                       |              | <sup>US-</sup> 4,893,311    | 01-09-1990 | Hunter et al.                                      |   |
|                       |              | <sup>US-</sup> 6,353,841 B1 | 03-05-2002 | Marshall et al.                                    |   |

|                       |              | FORE  | IGN PATENT DOCU     | MENTS  |   |   |
|-----------------------|--------------|---|---------------------|--|---|---|
| Examiner<br>Initials* | Cite<br>No.1 | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages | 6 |
|                       |              | Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          |  | Or Relevant Figures Appear                        |   |
|                       |              |   |                     |  |   |   |
|                       |              |   |                     |  |   |   |
|                       |              |   |                     |  | • .   |   |
|                       |              |   |                     |  |   |   |
|                       |              |   |                     |  |   |   |
| <u> </u>              |              |   |                     |  |   |   |

|                       |                    | - |  |
|-----------------------|--------------------|---|--|
| Examiner<br>Signature | Date<br>Considered |   |  |
| -                     |                    |   |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Andrew T. Caldwell

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

2142

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

Application Number 10/815,453

Filling Date March 31, 2004

First Named Inventor Ricardo E. Gonzalez

Art Unit

**Examiner Name** 

STATEMENT BY APPLICANT
(Use as many sheets as necessary)

Sheet 3 of 6 Attorney Docket Number PA2718US

| Examiner                                | Cite | Document Number                          | Publication Date | Name of Patentee or                | Pages, Columns, Lines, Where  |
|---|------|--|------------------|------------------------------------|-------------------------------|
| Initials*                               | No.1 | Document Number                          | MM-DD-YYYY       | Applicant of Cited Document        | Relevant Passages or Relevant |
|   |      | Number-Kind Code <sup>2 (if known)</sup> |                  |                                    | Figures Appear                |
|   |      | <sup>US-</sup> 6,237,079 B1              | 05-22-2001       | Stoney                             |                               |
|   |      | <sup>US-</sup> 5,488,612                 | 01-30-1996       | Heybruck                           |                               |
|   |      | <sup>US-</sup> 5,847,578                 | 12-08-1998       | Noakes et al.                      |                               |
|   |      | <sup>US-</sup> 6,415,424 B1              | 07-02-2002       | Arimilli et al.                    | •                             |
|   |      | <sup>US-</sup> 6,795,900 B1              | 09-21-2004       | Miller et al.                      |                               |
|   |      | <sup>US-</sup> 5,682,493                 | 10-28-1997       | Yung et al.                        |                               |
|   |      | <sup>US-</sup> 6,219,628 B1              | 04-17-2001       | Kodosky et al.                     |                               |
|   |      | <sup>US-</sup> 5,652,875                 | 07-29-1997       | Taylor                             |                               |
|   |      | <sup>US-</sup> 5,696,956                 | 12-09-1997       | Razdan et al.                      |                               |
|   |      | <sup>US-</sup> 5,784,636                 | 07-21-1998       | Rupp                               |                               |
|   |      | <sup>US-</sup> 5,819,064                 | 10-06-1998       | Razdan et al.                      |                               |
|   |      | <sup>US-</sup> 6,732,354 B2              | 05-04-2004       | Ebeling et al.                     |                               |
|   |      | <sup>US-</sup> 2003/0097546 A1           | 05-22-2003       | Taylor                             |                               |
| .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |      | <sup>US-</sup> 2003/0108119 A1           | 06-12-2003       | Mohebbi et al.                     |                               |
|   |      | <sup>US-</sup> 6,721,884 B1              | 04-13-2004       | De Oliveira Kastrup Pereira et al. |                               |
|   |      | <sup>US-</sup> 6,426,648 B1              | 07-30-2002       | Rupp                               |                               |
|   |      | <sup>US-</sup> 7,062,520 B2              | 06-13-2006       | Rupp                               |                               |
|   |      | <sup>US-</sup> 6,857,110 B1              | 02-15-2005       | Rupp et al.                        |                               |
|   |      | <sup>US-</sup> 6,744,274 B1              | 06-01-2004       | Arnold et al.                      | *                             |

|                       | FOREIGN PATENT DOCUMENTS |   |                     |  |   |            |  |  |
|-----------------------|--------------------------|---|---------------------|--|---|------------|--|--|
| Examiner<br>Initials* | Cite<br>No.1             | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages |            |  |  |
|                       |                          | Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          | ,,   | Or Relevant Figures Appear                        |            |  |  |
|                       |                          |   |                     |  |   | lacksquare |  |  |
|                       |                          |   |                     |  |   |            |  |  |
|                       |                          |   |                     |  |   |            |  |  |
|                       |                          |   |                     |  |   |            |  |  |
|                       |                          |   |                     |  |   |            |  |  |
|                       |                          |   |                     | ,  |   |            |  |  |

| Examiner  | Date  |       |
|-----------|-------|-------|
| Signature | Consi | dered |
|           |       |       |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

2142

Ricardo E. Gonzalez

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO **Application Number** 10/815,453 Filing Date March 31, 2004

Art Unit

First Named Inventor

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| (Use as many sheets as necessary) |   |    |   | Examiner Name          | Andrew T. Caldwell |
|-----------------------------------|---|----|---|------------------------|--------------------|
| Sheet                             | 4 | of | 6 | Attorney Docket Number | PA2718US           |

| Examiner  | Cite | Document Number                         | Publication Date | T DOCUMENTS  Name of Patentee or | Pages, Columns, Lines, Where                 |
|-----------|------|---|------------------|----------------------------------|--|
| Initials* | No.1 | Number-Kind Code <sup>2 (f known)</sup> | MM-DD-YYYY       | Applicant of Cited Document      | Relevant Passages or Relevant Figures Appear |
|           |      | <sup>US-</sup> 6,874,110 B1             | 03-29-2005       | Camarota                         |  |
|           |      | <sup>US-</sup> 6,292,388 B1             | 09-18-2001       | Camarota                         |  |
|           |      | <sup>US-</sup> 6,418,045 B2             | 07-09-2002       | Camarota                         |  |
|           |      | <sup>US-</sup> 7,000,211 B2             | 02-14-2006       | Arnold                           | ,  |
|           |      | <sup>US-</sup> 6,954,845                | 10-11-2005       | Arnold et al.                    | ·  |
|           |      | US-                                     |                  |                                  |  |
| ·-        |      | US-                                     |                  |                                  |  |
|           |      | US-                                     |                  | <u> </u>                         |  |
|           |      | US-                                     |                  |                                  |  |
|           | L    | US-                                     |                  |                                  |  |

|  | FOREIGN PATENT DOCUMENTS |   |                     |  |   |                |  |  |
|--|--------------------------|---|---------------------|--|---|----------------|--|--|
|  | Cite<br>No.1             | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear |                |  |  |
|  |                          | Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          |  |   | T <sup>6</sup> |  |  |
|  |                          | <u> </u>  |                     | ·  |   |                |  |  |
|  |                          |   |                     |  |   |                |  |  |
|  |                          |   |                     | •  |   |                |  |  |
|  |                          |   |                     |  |   |                |  |  |
|  |                          |   |                     |  |   |                |  |  |
|  |                          |   |                     |  |   |                |  |  |

| Examiner  |   | Date       |   |
|-----------|---|------------|---|
| Signature | • | Considered |   |
|           |   |            | 4 |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Inder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

| Substitut | te for form 1449/PTO   |          |           | Complete if Known      |                     |  |  |
|-----------|------------------------|----------|-----------|------------------------|---------------------|--|--|
| Cuboma    | 0 101 101111 144011 10 |          |           | Application Number     | 10/815,453          |  |  |
|           |                        |          | CLOSURE   | Filing Date            | March 31, 2004      |  |  |
| STA       | TEMENT B               | SY A     | PPLICANT  | First Named Inventor   | Ricardo E. Gonzalez |  |  |
|           | (Use as many she       | ets as n | ecessary) | Art Unit               | 2142                |  |  |
|           | 1000 do many one       | cia do m | ·         | Examiner Name          | Andrew T. Caldwell  |  |  |
| Sheet ·   | 5                      | of       | 6         | Attorney Docket Number | PA2718US            |  |  |

|                       |                          | NON PATENT LITERATURE DOCUMENTS   |                |
|-----------------------|--------------------------|---|----------------|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                       |                          | BEECK et al., "CRISP: A Template for Reconfigurable Instruction Set Processors," FPL 2001, LNCS 2147, pp. 296-305, Springer-Verlag Berlin Heidelberg, 2001.   |                |
|                       |                          | BECHADE et al., "Programmable Arithmetic/Logic Circuits," IBM Technical Disclosure Bulletin, U. S. IBM Corp., New York, Vol. 3, No. 11, April 1981, pp. 4870-4873, XP-000713711.  |                |
|                       |                          | DEHON, ANDRE, "Transit Note #118 Notes on Coupling Processors with Reconfigurable Logic," M.I.T. Transit Project, Last Updated March 21, 1995.  |                |
|                       |                          | TANENBAUM, ANDREW S., "Modern Operating Systems," 2001, 2nd edition, Prentice Hall, New Jersey, p. 31.  |                |
|                       |                          | HENNESSY, JOHN L. and DAVID A. PATTERSON, "Computer Organization and Design: The Hardware/Software Interface," 1998, 2nd edition, Morgan Kaufmann Publishers, Inc., San Francisco, CA, p. 345.  |                |
|                       |                          | LEE, K.C., "A Virtual Bus Architecture for Dynamic Parallel Processing," February 1993, IEEE Transactions on Parallel and Undistributed Systems, Vol. 4, No. 2, pp. 121-130.  |                |
|                       |                          | GOLDBLATT, KIM, "The Low-Cost, Efficient Serial Configuration of Spartan FPGAs," November 13, 1998, XAPP098 (Version 1.0), XILINX.  |                |
|                       |                          | SCOTT, STEVEN L. and GREGORY M. THORSON, "The Cray T3E Network: Adaptive Routing in a High Performance 3D Torus," August 15-16, 1996, HOT Interconnects IV, Stanford University.  |                |
|                       |                          | GOLESTANI, S. JAMALODDIN, "A Sto-and-Go Queuing Framework for Congestion Management," 1990, Proc. of the ACM Symposium on Communications Architectures & Protocols, ACM Press, New York, NY, pp. 8-18.  |                |
|                       |                          | DALLY, WILLIAM J. and CHARLES L. SEITZ, "Deadlock Free Message Routing in Multiprocessor Interconnection Networks," May 10, 1985, Computer Science Department, California Institute of Technology.  |                |

| Examiner  |   | Date       |  |
|-----------|---|------------|--|
| Signature | · | Considered |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

| Substitut | te for form 1449/PTO      |           |           | Complete if Known      |                     |  |  |
|-----------|---------------------------|-----------|-----------|------------------------|---------------------|--|--|
| Gubsinu   | te 10/10/11/11/14/0/11/10 |           |           | Application Number     | 10/815,453          |  |  |
| INF       | ORMATION                  | I DIS     | CLOSURE   | Filing Date            | March 31, 2004      |  |  |
| STA       | TEMENT                    | BY A      | PPLICANT  | First Named Inventor   | Ricardo E. Gonzalez |  |  |
|           | (Use as many sho          | note se n | ocossani) | Art Unit               | 2142                |  |  |
|           | (USE as many sin          | teis as n | ecessary) | Examiner Name          | Andrew T. Caldwell  |  |  |
| Sheet     | 6                         | of        | 6         | Attorney Docket Number | PA2718US            |  |  |

|                       |                          | NON PATENT LITERATURE DOCUMENTS   |                |
|-----------------------|--------------------------|---|----------------|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                       |                          | GARLAN, DAVID and MARY SHAW, "An Introduction to Software Architecture," January 1994, CMU-CS-94-166, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA.   |                |
|                       |                          | INTEL and HEWLETT-PACKARD, "IA-64 Application Instruction Set Architecture Guide," Revision 1.0, 1999, pp. C-1 through C.   |                |
|                       |                          | HWANG, KAI, "Advanced Computer Architecture: Parallelism, Scalability, Programmability," 1993, McGraw Hill, pp. 182-183.  |                |
|                       |                          | YE, Z.A. et al., "CHIMAERA: a high-performance architecture with a tightly-coupled reconfigurable functional unit," June 10-14, 2000, Proc. of the 27th International Symposium on Computer Architecture, pp. 225-235.  |                |
| . •                   |                          | MIPS Technologies, Inc., "MIPS Extension for Digital Media with 3D," 1996, pp. 1-26.  |                |
|                       |                          | BORGATTI, MICHELE et al., "A Reconfigurable System featuring Dynamically Extensible Embedded Microprocessor, FPGA and Customisable I/O," 2002, IEEE Custom Integrated Circuits Conference, pp. 1-4.   |                |
|                       |                          | RAZDAN, RAHUL and MICHAEL D. SMITH, "A High-Performance Michroarchitecture with Hardware-Programmable Functional Units," November 1994, Proc. of MICRO-27, pp. 1-9.   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |

|           | • |            |   |
|-----------|---|------------|---|
| Examiner  | , | Date       |   |
| Signature |   | Considered | • |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

1 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (09-06)

Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

quired to respond to a collection of information unless it contains a valid OMB control number. Under the Paperwork Reduction Ac

Substitute for form 1449/PTO

#### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Application Number** 10/815,453 Filing Date March 31, 2004 First Named Inventor Ricardo E. Gonzalez Art Unit 2142 **Examiner Name** Andrew T. Caldwell PA2718US

Complete if Known

| Sheet              | Sheet 1 of 6 |  |                                | Attorney Docket Number PA2718US                    |   |  |
|--------------------|--------------|--|--------------------------------|--|---|--|
|                    |              |  | U. S. PATEN                    | r DOCUMENTS  |   |  |
| Examiner Initials* | Cite<br>No.1 | Document Number  Number-Kind Code <sup>2</sup> (# known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |  |
|                    |              | <sup>US-</sup> 6,698,015 B1                              | 02-24-2004                     | Moberg et al.                                      |   |  |
|                    |              | <sup>US-</sup> 6,799,236 B1                              | 09-28-2004                     | Dice et al.  |   |  |
|                    |              | <sup>US-</sup> 5,822,588                                 | 10-13-1998                     | Sterling et al.                                    |   |  |
|                    |              | <sup>US-</sup> 6,817,013 B2                              | 11-09-2004                     | Tabata et al.                                      |   |  |
|                    |              | <sup>US-</sup> 6,968,544 B1                              | 11-22-2005                     | Schneider  |   |  |
|                    |              | <sup>US-</sup> 7,178,062 B1                              | 02-13-2007                     | Dice   |   |  |
|                    |              | <sup>US-</sup> 5,999,734                                 | 12-07-1999                     | Willis et al.                                      |   |  |
|                    |              | <sup>US-</sup> 6,622,233 B1                              | 09-16-2003                     | Gilson   |   |  |
|                    |              | <sup>US-</sup> 5,535,406                                 | 07-09-1996                     | Kolchinsky   |   |  |
|                    |              | <sup>US-</sup> 6,092,174                                 | 07-18-2000                     | Roussakov  |   |  |
|                    |              | <sup>US-</sup> 5,956,518                                 | 09-21-1999                     | DeHon et al.                                       |   |  |
|                    |              | <sup>US-</sup> 2004/0019765 A1                           | 01-29-2004                     | Klein, Jr.   |   |  |
|                    |              | <sup>US-</sup> 5,361,373                                 | 11-01-1994                     | Gilson   |   |  |
|                    |              | <sup>US-</sup> 2005/0166038 A1                           | 07-28-2005                     | Wang et al.  |   |  |
|                    |              | <sup>US-</sup> 5,488,612                                 | 01-30-1996                     | Heybruck   | -   |  |
|                    |              | <sup>US-</sup> 5,258,668                                 | 11-02-1993                     | Cliff et al.                                       |   |  |
|                    |              | <sup>US-</sup> 5,260,610                                 | 11-09-1993                     | Pedersen et al.                                    |   |  |
|                    |              | <sup>US-</sup> 5,260,611                                 | 11-09-1993                     | Cliff et al.                                       |   |  |
|                    |              | <sup>US-</sup> 5,274,581                                 | 12-28-1993                     | Cliff et al.                                       |   |  |

| Cite<br>No.1 | Foreign Patent Document   | Publication Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages | - |
|--------------|---|------------------|--|---|---|
|              | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) | MM-DD-YYYY       |  | Or Relevant Figures Appear                        | Ľ |
|              | EP 0 668 659 A2   | 08-23-1995       | Pilkington Germany                                 |   |   |
|              | EP 0 507 507 A2   | 10-07-1992       | American Telephone                                 |   |   |
|              | TW 152,994  | 07-22-2002       | Adaptive Silicon, Inc.                             |   | L |
|              | TW 168,210  | 04-15-2003       | Adaptive Silicon, Inc.                             |   |   |
|              | TW 152,355  | 07-10-2002       | Adaptive Silicon, Inc.                             |   |   |

| Examiner  | Date       | - |
|-----------|------------|---|
| Signature | Considered |   |
| - •       |            |   |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Code USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| Complete II Known      |                     |  |  |  |
|------------------------|---------------------|--|--|--|
| Application Number     | 10/815,453          |  |  |  |
| Filing Date            | March 31, 2004      |  |  |  |
| First Named Inventor   | Ricardo E. Gonzalez |  |  |  |
| Art Unit               | 2142                |  |  |  |
| Examiner Name          | Andrew T. Caldwell  |  |  |  |
| Attorney Docket Number | PA2718US            |  |  |  |

|                    |                                       |  | U. S. PATEN                 | T DOCUMENTS  |   |
|--------------------|---------------------------------------|--|-----------------------------|--|---|
| Examiner Initials* | Cite<br>No.1                          | Document Number  Number-Kind Code <sup>2 (# known)</sup> | Publication Date MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                    | · · · · · · · · · · · · · · · · · · · | US- 5,343,406  | 08-30-1994                  | Freeman et al.                                     |   |
|                    |                                       | US- 5,414,377  | 05-09-1995                  | Freidin  |   |
|                    | ļ                                     | US- 5,726,584  | 03-10-1998                  | Freidin  |   |
|                    |                                       |  |                             | · · · · · · · · · · · · · · · · · · ·              |   |
|                    |                                       | US- 5,426,378  | 06-20-1995                  | Ong  | •   |
|                    |                                       | <sup>US-</sup> 5,920,202                                 | 07-06-1999                  | Young et al.                                       |   |
|                    |                                       | <sup>US-</sup> 5,926,036                                 | 07-20-1999                  | Cliff et al.                                       |   |
|                    |                                       | <sup>US-</sup> 5,963,050                                 | 10-05-1999                  | Young et al.                                       |   |
|                    |                                       | <sup>US-</sup> 5,977,793                                 | 11-02-1999                  | Reddy et al.                                       |   |
|                    |                                       | <sup>US-</sup> 5,982,195                                 | 11-09-1999                  | Cliff et al.                                       | •   |
|                    |                                       | <sup>US-</sup> 5,986,465                                 | 11-16-1999                  | Mendel   |   |
|                    |                                       | <sup>US-</sup> 2001/0049816                              | 12-06-2001                  | Rupp   |   |
|                    |                                       | <sup>US-</sup> 6,633,181 B1                              | 10-14-2003                  | Rupp   |   |
|                    |                                       | <sup>US-</sup> 5,357,152                                 | 10-18-1994                  | Jennings, III et al.                               |   |
| ·                  |                                       | <sup>US-</sup> 5,742,180                                 | 04-21-1998                  | DeHon et al.                                       |   |
|                    |                                       | US- 5,436,574  | 07-25-1995                  | Veenstra   |   |
|                    |                                       | <sup>US-</sup> 4,635,261                                 | 01-06-1987                  | Anderson et al.                                    |   |
|                    | <b>1</b>                              | <sup>US-</sup> 4,766,659                                 | 08-30-1988                  | Cronenwett et al.                                  |   |
|                    |                                       | <sup>US-</sup> 4,893,311                                 | 01-09-1990                  | Hunter et al.                                      |   |
| •                  |                                       | <sup>US-</sup> 6,353,841 B1                              | 03-05-2002                  | Marshall et al.                                    |   |

| -                            | FORE  | IGN PATENT DOCU     | MENTS  | ·   |                |
|------------------------------|---|---------------------|--|---|----------------|
| Examiner Cite Initials* No.1 | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages |                |
|                              | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          |  | Or Relevant Figures Appear                        | T <sup>6</sup> |
|                              |   |                     |  |   |                |
|                              |   |                     |  |   |                |
|                              |   |                     |  |   |                |
|                              |   | ·                   |  |   |                |
| · ·                          |   | ·                   |  |   |                |
|                              |   |                     |  |   |                |

| Examiner Date        |  |
|----------------------|--|
| L'Administration     |  |
| Signature Considered |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| Complete II Kilowii    |                     |  |  |  |
|------------------------|---------------------|--|--|--|
| Application Number     | 10/815,453          |  |  |  |
| Filing Date            | March 31, 2004      |  |  |  |
| First Named Inventor   | Ricardo E. Gonzalez |  |  |  |
| Art Unit               | 2142                |  |  |  |
| Examiner Name          | Andrew T. Caldwell  |  |  |  |
| Attorney Docket Number | PA2718US            |  |  |  |

|                    |              |   | U. S. PATEN                    | DOCUMENTS  |   |
|--------------------|--------------|---|--------------------------------|--|---|
| Examiner Initials* | Cite<br>No.1 | Document Number                         | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                    |              | Number-Kind Code <sup>2 (# known)</sup> | 05.00.0004                     |  | 1 iguico / tipecui  |
|                    |              | <sup>US-</sup> 6,237,079 B1             | 05-22-2001                     | Stoney   |   |
|                    |              | <sup>US-</sup> 5,488,612                | 01-30-1996                     | Heybruck   |   |
|                    |              | <sup>US-</sup> 5,847,578                | 12-08-1998                     | Noakes et al.                                      |   |
|                    |              | <sup>US-</sup> 6,415,424 B1             | 07-02-2002                     | Arimilli et al.                                    |   |
|                    |              | <sup>US-</sup> 6,795,900 B1             | 09-21-2004                     | Miller et al.                                      |   |
|                    |              | <sup>US-</sup> 5,682,493                | 10-28-1997                     | Yung et al.  |   |
|                    |              | <sup>US-</sup> 6,219,628 B1             | 04-17-2001                     | Kodosky et al.                                     |   |
|                    |              | <sup>US-</sup> 5,652,875                | 07-29-1997                     | Taylor   |   |
|                    |              | <sup>US-</sup> 5,696,956                | 12-09-1997                     | Razdan et al.                                      |   |
|                    |              | <sup>US-</sup> 5,784,636                | 07-21-1998                     | Rupp   |   |
|                    |              | <sup>US-</sup> 5,819,064                | 10-06-1998                     | Razdan et al.                                      |   |
|                    |              | <sup>US-</sup> 6,732,354 B2             | 05-04-2004                     | Ebeling et al.                                     |   |
|                    |              | <sup>US-</sup> 2003/0097546 A1          | 05-22-2003                     | Taylor   |   |
|                    |              | <sup>US-</sup> 2003/0108119 A1          | 06-12-2003                     | Mohebbi et al.                                     |   |
|                    |              | <sup>US-</sup> 6,721,884 B1             | 04-13-2004                     | De Oliveira Kastrup Pereira et al.                 |   |
|                    |              | <sup>US-</sup> 6,426,648 B1             | 07-30-2002                     | Rupp   |   |
|                    |              | <sup>US-</sup> 7,062,520 B2             | 06-13-2006                     | Rupp   |   |
|                    |              | <sup>US-</sup> 6,857,110 B1             | 02-15-2005                     | Rupp et al.  |   |
|                    |              | <sup>US-</sup> 6,744,274 B1             | 06-01-2004                     | Arnold et al.                                      |   |

|                              | FORE  | <b>IGN PATENT DOCU</b> | MENTS  |   |                |
|------------------------------|---|------------------------|--|---|----------------|
| Examiner Cite Initials* No.1 | Cite Foreign Patent Document  | Publication<br>Date    | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages | Π              |
|                              | <br>. Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) | MM-DD-YYYY             | - Applicant of Otto Doddinont                      | Or Relevant Figures Appear                        | T <sup>6</sup> |
|                              |   |                        |  |   |                |
| •                            |   |                        |  |   |                |
|                              |   |                        |  |   |                |
|                              |   |                        |  |   |                |
|                              |   |                        |  |   |                |
|                              |   |                        |  |   | <b>—</b>       |

| Examiner  |     | Date        |  |
|-----------|-----|-------------|--|
|           |     |             |  |
| Signature | l ( | Considered  |  |
| o.gata.o  | 1   | 00110100100 |  |
|           |     |             |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

| Application Number     | 10/815,453 .        |  |  |  |  |  |
|------------------------|---------------------|--|--|--|--|--|
| Filing Date            | March 31, 2004      |  |  |  |  |  |
| First Named Inventor   | Ricardo E. Gonzalez |  |  |  |  |  |
| Art Unit               | 2142                |  |  |  |  |  |
| Examiner Name          | Andrew T. Caldwell  |  |  |  |  |  |
| Attorney Docket Number | PA2718US            |  |  |  |  |  |

Complete if Known

|                       |              |   | U. S. PATENT                   | DOCUMENTS  |   |
|-----------------------|--------------|---|--------------------------------|--|---|
| Examiner<br>Initials* | Cite<br>No.1 | Document Number                         | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                       |              | Number-Kind Code <sup>2 (f known)</sup> |                                |  | 1 1941007 199001  |
|                       |              | <sup>US-</sup> 6,874,110 B1             | 03-29-2005                     | Camarota   |   |
|                       |              | <sup>US-</sup> 6,292,388 B1             | 09-18-2001                     | Camarota   |   |
|                       |              | <sup>US-</sup> 6,418,045 B2             | 07-09-2002                     | Camarota   |   |
|                       |              | <sup>US-</sup> 7,000,211 B2             | 02-14-2006                     | Arnold   |   |
|                       |              | <sup>US-</sup> 6,954,845                | 10-11-2005                     | Arnold et al.                                      | ·   |
|                       |              | US-                                     |                                |  |   |
|                       |              | US-                                     |                                |  |   |
|                       |              | US-                                     |                                |  |   |
| •                     |              | US-                                     |                                |  |   |
|                       |              | US-                                     | -                              |  |   |
|                       |              | US-                                     | · .                            |  |   |
|                       | <u> </u>     | US-                                     |                                |  |   |
|                       |              | US-                                     |                                |  |   |
|                       |              | US-                                     |                                |  |   |
|                       |              | US-                                     |                                |  |   |

|                    |              | FOREI   | GN PATENT DOCU      | MENTS  |   |   |
|--------------------|--------------|---|---------------------|--|---|---|
| Examiner Initials* | Cite<br>No.1 | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages |   |
|                    |              | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          |  | Or Relevant Figures Appear                        | ₽ |
|                    |              | •   |                     |  |   |   |
|                    |              |   |                     |  |   |   |
|                    |              |   |                     |  |   |   |
|                    |              |   |                     |  |   |   |
|                    |              |   |                     |  |   |   |
|                    |              |   |                     |  |   |   |

|           | • |            |  |
|-----------|---|------------|--|
| Examiner  |   | Date       |  |
| Signature |   | Considered |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

| Substitute for form 1449/PTO      |                        | Complete if Known |           |                        |                     |  |
|-----------------------------------|------------------------|-------------------|-----------|------------------------|---------------------|--|
| Cubstitut                         | C 101 101111 144077 10 |                   |           | Application Number     | 10/815,453          |  |
| INFO                              | DRMATION               | DIS               | CLOSURE   | Filing Date            | March 31, 2004      |  |
| STA                               | TEMENT E               | BY A              | PPLICANT  | First Named Inventor   | Ricardo E. Gonzalez |  |
| (Use as many sheets as necessary) |                        |                   |           | Art Unit               | 2142                |  |
|                                   | Ose as many sne        | ets as m          | ecessary) | Examiner Name          | Andrew T. Caldwell  |  |
| Sheet                             | 5                      | of                | 6 .       | Attorney Docket Number | PA2718US            |  |

|                       |              | NON DATENT LITTED ATTUDE DOCUMENTS   |   |  |  |
|-----------------------|--------------|--|---|--|--|
| Examiner<br>Initials* | Cite<br>No.1 |  |   |  |  |
|                       |              | BEECK et al., "CRISP: A Template for Reconfigurable Instruction Set Processors," FPL 2001, LNCS 2147, pp. 296-305, Springer-Verlag Berlin Heidelberg, 2001.  |   |  |  |
|                       |              | BECHADE et al., "Programmable Arithmetic/Logic Circuits," IBM Technical Disclosure Bulletin, U. S. IBM Corp., New York, Vol. 3, No. 11, April 1981, pp. 4870-4873, XP-000713711.                       |   |  |  |
|                       |              | DEHON, ANDRE, "Transit Note #118 Notes on Coupling Processors with Reconfigurable Logic," M.I.T. Transit Project, Last Updated March 21, 1995.   |   |  |  |
|                       | :            | TANENBAUM, ANDREW S., "Modern Operating Systems," 2001, 2nd edition, Prentice Hall, New Jersey, p. 31.   |   |  |  |
|                       |              | HENNESSY, JOHN L. and DAVID A. PATTERSON, "Computer Organization and Design: The Hardware/<br>Software Interface," 1998, 2nd edition, Morgan Kaufmann Publishers, Inc., San Francisco, CA, p. 345.     |   |  |  |
|                       |              | LEE, K.C., "A Virtual Bus Architecture for Dynamic Parallel Processing," February 1993, IEEE Transactions on Parallel and Undistributed Systems, Vol. 4, No. 2, pp. 121-130.                           |   |  |  |
|                       |              | GOLDBLATT, KIM, "The Low-Cost, Efficient Serial Configuration of Spartan FPGAs," November 13, 1998, XAPP098 (Version 1.0), XILINX.   |   |  |  |
|                       |              | SCOTT, STEVEN L. and GREGORY M. THORSON, "The Cray T3E Network: Adaptive Routing in a High Performance 3D Torus," August 15-16, 1996, HOT Interconnects IV, Stanford University.                       | · |  |  |
|                       |              | GOLESTANI, S. JAMALODDIN, "A Sto-and-Go Queuing Framework for Congestion Management," 1990, Proc. of the ACM Symposium on Communications Architectures & Protocols, ACM Press, New York, NY, pp. 8-18. |   |  |  |
|                       |              | DALLY, WILLIAM J. and CHARLES L. SEITZ, "Deadlock Free Message Routing in Multiprocessor Interconnection Networks," May 10, 1985, Computer Science Department, California Institute of Technology.     |   |  |  |
|                       |              |  |   |  |  |

|           | • |            |   |
|-----------|---|------------|---|
| Examiner  |   | Date       |   |
| Signature |   | Considered | • |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

1 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|   | te for form 1449/PTO |            |   | Complete if Known      |                     |  |
|---|----------------------|------------|---|------------------------|---------------------|--|
|   |                      |            |   | Application Number     | 10/815,453          |  |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT |                      |            |   | Filing Date            | March 31, 2004      |  |
|   |                      |            |   | First Named Inventor   | Ricardo E. Gonzalez |  |
|   |                      |            |   | Art Unit               | 2142                |  |
|   | (030 d3 many and     | .013 43 77 | · | Examiner Name          | Andrew T. Caldwell  |  |
| Sheet   | 6                    | of         | 6 | Attorney Docket Number | PA2718US            |  |

|                       |                          | NON PATENT LITERATURE DOCUMENTS   |                |
|-----------------------|--------------------------|---|----------------|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                       |                          | GARLAN, DAVID and MARY SHAW, "An Introduction to Software Architecture," January 1994, CMU-CS-94-166, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA.   |                |
|                       |                          | INTEL and HEWLETT-PACKARD, "IA-64 Application Instruction Set Architecture Guide," Revision 1.0, 1999, pp. C-1 through C.   |                |
|                       |                          | HWANG, KAI, "Advanced Computer Architecture: Parallelism, Scalability, Programmability," 1993, McGraw Hill, pp. 182-183.  |                |
|                       |                          | YE, Z.A. et al., "CHIMAERA: a high-performance architecture with a tightly-coupled reconfigurable functional unit," June 10-14, 2000, Proc. of the 27th International Symposium on Computer Architecture, pp. 225-235.  | ·              |
|                       |                          | MIPS Technologies, Inc., "MIPS Extension for Digital Media with 3D," 1996, pp. 1-26.  |                |
|                       |                          | BORGATTI, MICHELE et al., "A Reconfigurable System featuring Dynamically Extensible Embedded Microprocessor, FPGA and Customisable I/O," 2002, IEEE Custom Integrated Circuits Conference, pp. 1-4.   |                |
|                       |                          | RAZDAN, RAHUL and MICHAEL D. SMITH, "A High-Performance Michroarchitecture with Hardware-Programmable Functional Units," November 1994, Proc. of MICRO-27, pp. 1-9.   |                |
|                       |                          |   |                |
|                       |                          |   |                |
|                       |                          |   |                |

| Examiner  |   | Date       |  |
|-----------|---|------------|--|
| Signature | · | Considered |  |
|           |   |            |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Ricardo E. Gonzalez et al.

APPLICATION NO.:

10/815,453

FILED:

March 31, 2004

TITLE:

Configuring a Multi-Processor System

**EXAMINER:** 

Andrew T. Caldwell

GROUP ART UNIT:

2142

ATTY.DKT.NO.:

**PA2718US** 

COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

### <u>List of Co-Pending Patents or Patent Applications That May Be Directed</u> <u>Towards Similar Subject Matter</u>

| Examiner's | Application | First-Named       | Title   | ,           |
|------------|-------------|-------------------|---|-------------|
| Initials   | Number      | Inventor          |   | Filing Date |
|            |             |                   | Defining Instruction Extensions in a Standard |             |
|            | 10/630,542  | Kenneth Williams  | Programming Language                          | 07-29-2003  |
|            | 10/404,706  | Scott D. Johnson  | Extension Adapter                             | 03-31-2003  |
|            |             |                   | Transitive Processing Unit for Performing     |             |
|            | 10/394,824  | Charle' Rupp      | <u> </u>                                      | 03-21-2003  |
|            |             |                   | Instruction Set for Efficient Bit Stream and  |             |
|            | 10/686,882  | Kenneth Williams  | Byte Stream I/O                               | 10-15-2003  |
|            |             |                   | Systems and Methods for Software              |             |
|            | 10/750,714  | Ricardo Gonzalez  | Extensible Multi-Processing                   | 12-31-2003  |
|            | 10/815,453  | Ricardo Gonzalez  | Configuring a Multi-Processor System          | 03-31-2004  |
|            |             |                   | Systems and Methods for Selecting I/O         |             |
|            | 11/021,247  | Ricardo Gonzalez  | Interfaces for Configurable Processors        | 12-21-2004  |
|            |             |                   | Long Instruction Word Processing with         |             |
|            | 11/129,146  | Ricardo Gonzalez  | Instruction Extensions                        | 05-12-2005  |
|            |             |                   | Video Processing System with                  |             |
|            | 11/099,280  | Jeffrey M. Arnold | ·   | 04-04-2005  |
|            |             |                   | Programmable Logic Configuration for          |             |
|            | 11/204,555  | Jeffrey M. Arnold | Instruction Extensions                        | 08-15-2005  |
| Examiner's |             |                   |   | Date        |
| Signature: |             |                   |   |             |